In the claims:

B1 2. (Twice Amended) A composite material comprising a thermoplastic hydrophilic matrix having dispersed therein droplets of a hydrophobic active ingredient, said droplets having a droplet size in the range of 0.01 – 2 microns. [and a liquid active ingredient dispersed in an oil-in water emulsion, wherein the liquid active ingredient forms inclusions in the matrix of uniformly distributed droplets, with a droplet size of between 0.01 μm to 2μm.]

B2 3. (Amended) A composite material according to claim 2 wherein the droplets [inclusions] have a droplet size of between 0.04 μm and 1 μm.

B3 4. (Twice Amended) A composite material according to claim 2 wherein the [a] load of the active ingredient in the composite material is between 1 to 50% w/w.

B4 5. (Amended) A composite material according to claim 5 wherein the [a] load of the active ingredient in the composite material is between 5 to 15% w/w.

11. (Twice Amended) A method for preparing a composite material comprising:
(a) mixing a liquid active ingredient in a oil-in-water emulsion with a matrix premix comprising a thermoplastic hydrophilic polymer; and
(b) extruding the mixture of (a) to form a composite material characterized in that the composite material comprises a thermoplastic hydrophilic matrix and a hydrophobic active ingredient dispersed as droplets in the said matrix said droplets having a droplet size in the range of 0.01 – 2 microns.

B5 25. (Amended) A protective or controlled release system for an active ingredient comprising a composite material comprising a thermoplastic hydrophilic matrix and a hydrophobic [an] active ingredient dispersed as droplets within the thermoplastic hydrophilic matrix having [in a oil-in-water emulsion wherein the active ingredient forms inclusions of

uniformly distributed droplets with] a droplet size in the range of 0.01 – 2 microns. [of between 0.01 μm to 2 μm in the matrix.]

Please also add the following new claims:

28. A composite material comprising thermoplastic hydrophilic matrix and a hydrophobic active ingredient dispersed as droplets in the said thermoplastic hydrophobic matrix said droplets having a droplet size in the range of 0.01 – 2 microns produced by a process which includes the steps of:

(a) forming a mixture of a hydrophobic liquid active ingredient in a oil-in-water emulsion with a matrix premix comprising a thermoplastic hydrophilic polymer; and

(b) extruding the mixture of (a) to form a composite material.

29. The composite material according to claim 28 wherein the process including the further step of:

introducing the mixture of (a) into an extruder before extrusion.

30. The composite material according to claim 28 wherein the process includes the further step of:

introducing an oil-in-water emulsion containing the hydrophobic active ingredient into a barrel of an extruder, which barrel contains the matrix premix, and mixing the oil-in-water emulsion with the matrix premix.

31. The composite material according to claim 28 wherein the process includes the further step of:

forming a mixture of a hydrophobic active ingredient in an oil-in-water emulsion, with a matrix premix comprising a thermoplastic hydrophilic polymer wherein the polymeric fraction comprises 50% w/w to 100% w/w of the matrix premix.

32. The composite material according to claim 28 wherein the process includes the further step of:

forming a mixture of a hydrophobic active ingredient in a oil-in-water emulsion with a matrix premix comprising a thermoplastic hydrophilic polymer wherein the oil-in-water emulsion contains 5 to 80% w/w active ingredients, 10 to 90% w/w water, 0.5 to 10% w/w emulsifier, and 0 to 10% w/w additives.

33. The composite material according to claim 28 wherein the process includes the further step of:

forming a mixture of a hydrophobic active ingredient in a oil-in-water emulsion with a matrix premix comprising a thermoplastic hydrophilic polymer wherein the oil-in-water emulsion contains 30 to 60% w/w active ingredients, 15 to 40% w/w water, 0.5 to 10% w/w emulsifier, and 0 to 10% w/w additives.

34. The composite material according to claim 28 wherein the process includes the further step of:

forming a mixture of a hydrophobic active ingredient in an oil-in-water emulsion with a matrix premix comprising a thermoplastic hydrophilic polymer wherein the matrix premix comprises a hydrophilic thermoplastic polymer and an additive.

35. The composite material according to claim 28 wherein the process includes the further step of:

forming a mixture of a hydrophobic active ingredient in a oil-in-water emulsion with a matrix premix comprising a thermoplastic hydrophilic polymer wherein the hydrophilic thermoplastic polymer is selected from the group consisting of native starch, modified starch, thermoplastic starch, polyvinyl alcohol, its copolymers, and polyesters.

36. The composite material according to claim 34 wherein the additive is selected from the group consisting of cross linking agents, plasticizers, antiplasticizers, fillers, and mixtures thereof.

37. The composite material according to claim 28 wherein the process includes the further step of:

forming a mixture of a hydrophobic active ingredient in an oil-in-water emulsion with a matrix premix comprising a thermoplastic hydrophilic polymer wherein the oil-in-water emulsion further comprises an emulsifier and a surfactant.

38. The composite material according to claim 37 wherein the emulsifier is selected from the group consisting of a modified starch, a sucrose or sorbitol ester of a fatty acid, a carbohydrate, a phospholipid, and mixtures thereof.

39. The composite material according to claim 37 wherein the surfactant is selected from the group consisting of a monomolecular surfactant, a polymeric surfactant, and a colloid stabilizer.

40. The composite material according to claim 39 wherein there is also present a co-surfactant.

41. The composite material according to claim 40 wherein the co-surfactant is a primary alcohol or a short chain alkylsulfate.